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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/961,078	09/21/2001	Joel E. Cordsmeyer	BELL-0116/01114	5101

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EXAMINER	
GREY, CHRISTOPHER P	
ART UNIT	**PAPER NUMBER**
2616	

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/961,078	CORDSMEYER ET AL.	
	Examiner	Art Unit	
	Christopher P. Grey	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 September 2001*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-9, 12-24, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barker et al. (US 6363421) in view of Chisholm (US 6697970).

Claim 1, 16, 27 Barker et al. ('Barker' hereinafter) discloses a method for remote management of telecommunications network elements.

Barker discloses a management computer connected to an element management server. (Col 1 lines 25-35). Barker also discloses an application processor (intermediary) for interfacing the element management server and the network element (Col 1 lines 55-65).

Barker discloses a remote management computer issuing multiple commands to the element management server, and furthermore, the element management server responding to these commands (Col 1 line 66- Col 2 line 17). Barker discloses detailed status information being maintained for the network element (Col 4 lines 27-36 and Col 5 lines 17-20).

Barker does not specifically disclose gathering status information for the fabric structure. However, Chisholm discloses a network element switch (Col 1 lines 46-59) and ant he network element being a multiplexing element (Col 4 lines 45-54). Chisholm also discloses maintaining an inventory table for a network element, and the system manager having summarized information concerning the identity and status of the network element and the element management server (Col 5 lines 56-66).

Chishom discloses requesting information from an element manager (Col 5 lines 56-67). Chisholm also discloses requesting information from a network element (switch fabric) as disclosed in Col 5 lines 5-14 and see fig 1 and 2.

It would have been obvious to one of the ordinary skill in the art at the time of the invention that the network element as disclosed by Barker is equivalent to any network element within the art, particularly the network switching multiplexing element as disclosed by Chisholm. Furthermore, the network element of Barker may be modified to employ polling directly to the network element as disclosed by Chisholm. The motivation for this modification is to retrieve information about the network element in order to obtain information of interest to the NMS (Col 5 lines 15-19).

Claim 2, 18 Barker discloses a TCP/IP connection between an element management system client and an element management system server, and also a TCP/IP connection between an application processor and an element management system server (Fig 3 element 32 and 28, and elements 32 and 80).

Claim 3, 19 Barker discloses the TCP/IP session as disclosed in the rejection of claim 2 and 18. Barker also discloses the use of terminal emulation (Col 26 lines 60-Col 27 line 4).

Claim 4, 20 Barker discloses the use of terminal emulation as disclosed in the rejection of claim 3. Barker discloses establishing a telnet session (Col 26 lines 60-Col 27 line 4).

Claim 5, 21 Barker discloses a TCP/IP connection as disclosed in the rejection of claim 2 and 18. Barker discloses remotely managing a network element through a special communication link (Col 1 lines 25-36). It would have been obvious to one of the ordinary skill in the art that links connect ports, where a special link would require a special port, where a special port may be specified as being an unassigned port.

Claim 6 Barker discloses each client application registering with the element manager, where registering comprises providing identification and a port (address) of the client host (Col 30 lines 45-63).

Claim 7 The combined inventions of Barker and Chisholm disclose gathering a network address in the form of an identifier as disclosed in the rejection of claim 6, where it would have been obvious to one of the ordinary skill in the art at the time of the invention to equivocate any identifier as a cilli code.

Claim 8, 23 The rejection of claim 1 discloses issuing a first and second interface retrieve commands. Furthermore, Barker discloses TCP/IP protocols (Col 4 lines 6-17), where it would have been obvious to

one of the ordinary skill in the art at the time of the invention that transport protocols are often applied as protocol independent.

Claim 9, 24 The rejection of claims 8 and 24 disclose issuing the protocol independent interface retrieve commands. Furthermore, Barker discloses transport protocols (Col 4 lines 6-17), which are applied on a transport level.

Claim 12 Barker discloses a network element status table for storing status information (Fig 3 element 96).

Claim 13 Barker discloses a detailed status application that displays (report) static configuration data (Col 5 lines 17-20).

Claim 14 Barker discloses detailed status information being maintained for the network element (Col 4 lines 27-36 and Col 5 lines 17-20) and furthermore the rejection of claim 1 discloses gathering status information for the switch fabric. However, Barker does not disclose repeating gathering status information for the switch fabric for each remaining multiplexing element.

Chisholm discloses a plurality of network elements (Fig 1 element 14 A-C) being managed by an element management server (element 18 in Fig 1). Chisholm also discloses system manager managing status information of all of the network elements (Col 5 lines 56-67). It would have been obvious to one of the ordinary skill in the art at the time of the invention to combine the management of a network from a remote location as disclosed by Barker, with the management of a number of network elements as disclosed by Chisholm, where gathering status information would have to be repeated for each network element in order to maintain the status information of all of the elements. The motivation for this modification is to be able to remotely manage/maintain network elements.

Claim 15 Barker discloses a management computer connected to an element management server (Col 1 lines 25-35). The management computer retrieves status information obtained from the element management server (Col 5 lines 17-20). Barker does not specifically disclose repeating gathering status information for each remaining element manager.

Chisholm discloses a plurality of network elements (Fig 1 element 14 A-C) being managed by an element management server (element 18 in Fig 1). Chisholm also discloses system manager managing

status information of all of the network elements (Col 5 lines 56-67). It would have been obvious to one of the ordinary skill in the art at the time of the invention that each network element could be assigned their own manager, and furthermore it would have been obvious to modify the remote management computer as disclosed by Barker to manage the element management servers as discussed above. The motivation for this modification is to be able to remotely manage/maintain network elements.

Claim 16 Barker discloses a management computer connected to an element management server. (Col 1 lines 25-35). Barker also discloses an application processor (intermediary) for interfacing the element management server and the network element (Col 1 lines 55-65).

Barker discloses the network element being connected to a management agent application for performing maintenance. Barker also discloses command requests being issued and command acknowledgements (Col 1 lines 55-65).

Barker discloses a remote management computer issuing multiple commands to the element management server, and furthermore, the element management server responding to these commands (Col 1 line 66- Col 2 line 17). Barker discloses detailed status information being maintained for the network element (Col 4 lines 27-36 and Col 5 lines 17-20).

Barker does not specifically disclose the network element being a multiplexing element. However, Chisholm discloses a management system wherein any network element may be considered a multiplexing element (Col 4 lines 45-54).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to specify the network element as disclosed by Barker with a multiplexing element as disclosed by Chisholm. The motivation for this specification is to provide switching functions and transport network functions (Col 4 lines 45-54).

Claim 17 Barker discloses a remote management computer running a management application (software) as disclosed in Col 2 lines 18-33.

2. Claims 10, 11, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barker et al. (US 6363421) in view of Chisholm (US 6697970) in further view of Teixeira (US 2002/0101864)

Claims 10, 11, 25 and 26 The combined teachings of Barker and Chisholm do not specifically disclose determining the number of cross connects in the multiplexing element.

Teixeira discloses a network management system connected to a cross connect switch, where the NMS can determine the status and configuration of the cross connects over a network (page 2 paragraph 0029).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the NMS within the combined teachings of Barker and Chisholm, to use the cross connect status and configuration information as disclosed by Teixera within the inventory scheme. The motivation for this modification is to achieve control of the switching element from a remote site (page 2 paragraph 0029).

Response to Arguments

3. Applicant's arguments filed Feb 20, 2006 have been fully considered but they are not persuasive.

(a) The applicant argued that the newly amended claim 1 now places the application in condition for allowance.

The examiner asserts that the amendment, "a plurality of element managers" is disclosed by Chisholm in Col 4 lines 55-63.

The examiner asserts that the amended, "a plurality of multiplexing elements" is disclosed by Chisholm in Col 4 lines 45-54 and fig 1 element 14 A-C.

The examiner asserts that the amended, "repeating gathering...of element managers." Is disclosed by Chisholm in fig 3 and Col 5 lines 5-67. Chishom discloses signaling using polling/response cycles.

(b) The applicant argued that because Barker and Chisholm do not address the same problem there is no motivation to combine.

The examiner asserts that there is a clear motivation to combine, as Barker discloses gathering status information through polling (Col 4 lines 37-55) and so does Chishokm as disclosed in Col 5 lines 5-67. Chisholm is being applied to show that polling is not limited to being applied to just one network element.

The problems addressed within the references may differ from those achieved within the specification of the application, however, the independent claims interpreted broadly, do not reflect the direct problem achieved by the applicants invention.

(c) The applicant argued that neither reference discloses a multiplexing element having a switch fabric.

The examiner asserts that a switch fabric by definition is merely a descriptive term referring to the structure of a switch. Furthermore, Chisholm discloses a switch fabric in Col 4 lines 45-54.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Grey whose telephone number is (571)272-3160. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571)272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Grey
Examiner
Art Unit 2616

5/18/06

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